



Forest Insect & Disease Management

Report # 80-3-20

Issued on: 6-4-80

AERIAL DETECTION SURVEY OF FOREST
INSECT AND DISEASE ACTIVITY, STATE
AND PRIVATE LANDS, KENTUCKY

LAND OWNERSHIP OR SURVEY AREA: State and Private Lands

STATE: ~~Kentucky~~ COUNTIES: Bullitt, Edmonson, Nelson,
Larue, Hardin, Hart, Grayson

AREA WITHIN SURVEY BOUNDARY: 1,306,686 acres

DATE: May 27 - May 29, 1980

PERCENT COVERAGE: 50%

AIRCRAFT: Aero Commander 680

CREW: Richard Dorsett (Kentucky Div. of Forestry), John Ghent
(FIDM Asheville FO), Cindy Mitchell (FIDM Asheville FO),
W.A. Carothers (FIDM Doraville FO)

REPORT PREPARED BY: W.A. Carothers

SURVEY OBJECTIVES

To locate and quantify defoliation of hardwood species occurring
in the survey area.

SURVEY RESULTS

Aerial surveys were conducted from May 27 - May 30, 1980 in the
survey area. Defoliation of hardwoods was not readily evident
from the air. Individual defoliated hardwoods were observed
throughout the survey area, but no pattern of consistent defoliation
was observed. Because of the limited amount of defoliation and the
lack of severity, it was impossible to quantify the damage.

Ground checks indicate that several causal insects are responsible
for the defoliation. Spring cankerworm (Paleacrita vernata (Peck)),
Linden looper (Erannis tiliara (Harr.)), and the Phigalid looper
(Phigalia titea (Cram.)), were positively identified and several
other species were collected and are currently being identified.

SOUTHEASTERN AREA, STATE & PRIVATE FORESTRY
USDA FOREST SERVICE, ATLANTA, GA 30309

CONCLUSIONS

Defoliation of hardwood species has been noted throughout the survey area since 1977. The amount and severity of defoliation are less this year than in preceding years. While spring defoliators are sometimes extremely abundant, their impact on tree growth is minimal and usually no hardwood mortality results. High populations of these insects can become a major nuisance in shade trees and other high value areas, such as campgrounds and picnic facilities. Populations of these insects are usually held in check by natural control agents (rodents, carnivorous insects, insect parasites and viruses) through predation and parasitism, therefore no control measures are usually necessary.

For additional information, contact:

USDA Forest Service FIDM
Northgate Office Park, Room 2103 or
3620 Interstate 85, N.E.
Doraville, GA 30340
Phone: 404/221-4796

USDA Forest Service FIDM
P.O. Box 2570
Asheville, NC 28802
Phone: 704/258-2850